IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/008,271	§	Examiner: Phan, Thai Q.
Filed: November 9, 2001	§	Group/Art Unit: 2128
Inventor(s):	§	Atty. Dkt. No: 5181-96500
James P. Freyensee, Carl	§	
Cavanagh, Steven A. Sivier, and	§	
Carl B. Frankel	§	
	§	
Title: Hot Plug and Hot Pull	§	
System Simulation	§	
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Lawrence J. Merkel
_____
Printed Name

_____ 3/21/06
Signature   Date

PRE-APPEAL BRIEF REQUEST FOR REVIEW

ATTN: Mailstop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. Independent claims 1, 11, 20, 27, and 34 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kumar et al, U.S. Patent Application Publication No. 2003/0005200 ("Kumar"). Applicants set forth the clear errors in the rejections below. Please note that for brevity, only the primary arguments directed mainly to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal.

Applicant respectfully submits that each of claims 1-39 recites a combination of features not taught or suggested in the cited art. For example, claim 1 recites a combination of features including: "the first node is configured to simulate a first

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component of the system under test...wherein, responsive to the hot pull command, the first node ceases participation in the simulation to simulate a removal of the first component from the system under test". Applicant notes that, to anticipate a claim, a single prior art reference must teach EACH and EVERY feature of a claim. Kumar fails to anticipate claim 1.

For example, Kumar does not teach or suggest simulating a hot plug or hot pull in a simulation of a system under test, but rather teaches an actual system in which components can be hot plugged or hot pulled. For example, Kumar teaches "The invention relates to a platform and method for supporting and representing a hot-plugged node and its constituent components as a collective unit to its operating system (OS). The constituent components are initialized to a known state through a distributed BIOS mechanism before the OS is made aware of their presence. For this embodiment, the platform is configured with OS-directed device configuration and power management of both the node/components and the platform itself." (Kumar, paragraph 16). Here, Kumar is clearly referring to actual hardware being hot plugged into an actual system. Kumar teaches software (e.g. the INIT BIOS) that initializes the hot-plugged hardware and provides an interface for the O/S, but nevertheless the actual hardware is hot-plugged or hot-pulled.

Kumar also teaches "SNC0 120 comprises a port interface 123 that enables a communication path to firmware hub 140 via link 142. Firmware hub 140 comprises INIT BIOS 141 that is configured to initialize processors 127_1-127_M, local memory 133, and scalability port interfaces 124_1 and 124_2 to communicate with the OS. As a result, the distributed INIT BIOS 141 enables hot-plug addition of a boot node, namely first processor substrate 110, and supports dynamic partitioning of platform 200." (Kumar, paragraph 27) Kumar further teaches "platform 200 may undergo a hot-plug removal of a node featuring SCN0 120 mounted on first processor substrate 110. This may be accomplished by the OS transmitting an ejection notice for a container object that identifies SCN0 as well as its constituent components coupled thereto (see FIG. 7). Likewise, when undergoing a hot-plug addition of a node (e.g., SCN0 120 being the

primary component), after initialization of its constituent components by the distributed INIT BIOS 141, the OS would bring local memory 133 online prior to processors 127_1-127_M so that such memory may be allocated to processors 127_1-127_M before selecting remotely located memory." (Kumar, paragraph 37). Clearly, again, Kumar is teaching hot plug and hot pull of <u>actual components in an actual system</u>. Finally, Kumar teaches dynamic partitioning of the system using hot plug/hot pull-like behavior (e.g. Kumar paragraphs 38-46.

All of the above teachings of Kumar teach hot plug/hot pull operation for nodes of a physical system. Nothing teaches or suggests the combinations of features recited in claims 1-39. Kumar's actual hot plug/hot pull operation in the hardware teaches nothing regarding nodes <u>simulating components</u> of a system under test and <u>simulating hot pull by ceasing participation</u> in the simulation.

Claim 11 recites "the first node configured ... <u>to simulate a first component of a system under test in the simulation</u> ... and ceasing participation of the first node in the simulation responsive to the hot pull command <u>to simulate a removal of the first component from the system under test</u>". The same teachings of Kumar highlighted above with regard to claim 1 are alleged to teach the above features of claim 11. Applicants respectfully submit that Kumar does not teach or suggest the above highlighted features either.

Claim 20 recites a combination of features including "first instructions which, when executed, <u>cease participation</u> in a simulation by a first node in a distributed simulation system <u>responsive to receiving a hot pull command, the first node simulating a first component of a system under test, and the first node ceasing participation in the simulation simulates removal of the first component from the system under test</u>". The same teachings of Kumar highlighted above with regard to claim 1 are alleged to teach the above features of claim 20. Applicants respectfully submit that Kumar does not teach or suggest the above highlighted features either.

Claim 27 recites a combination of features including: "a second node configured to transmit a <u>hot plug command</u> designating the first node; wherein the first node <u>does not participate in the simulation prior to the hot plug command, and wherein the first node begins participation in the simulation responsive to the hot plug command to simulate insertion</u> of the first component in the system under test". The same teachings of Kumar highlighted above with regard to claim 1 are alleged to teach the above features of claim 27. Applicants respectfully submit that Kumar does not teach or suggest the above highlighted features either.

Claim 34 recites a combination of features including: "<u>receiving a hot plug command designating a first node</u>... and the first node beginning participation in the simulation responsive to the hot plug command <u>to simulate insertion of the first component into the system under test</u>". The same teachings of Kumar highlighted above with regard to claim 1 are alleged to teach the above features of claim 34. Applicants respectfully submit that Kumar does not teach or suggest the above highlighted features either.

For at least all of the above stated reasons, Applicants submit that claims 1, 11, 20, 27, and 34 are patentable over the cited art. Claims 2-10 (being dependent from claim 1), claims 12-19 (being dependent from claim 11), claims 21-26 (being dependent from claim 20), claims 28-33 (being dependent from claim 27), and claims 35-39 (being dependent from claim 34) are similarly patentable over the cited art for at least the above stated reasons. Each of claims 2-10, 12-19, 21-26, 28-33, and 35-39 recites additional combinations of features not taught or suggested in the cited art. Given the patentability of claims 1, 11, 20, 27, and 34, Applicants have not highlighted such additional combinations of features in this request. **However, Applicants reserve the right to highlight such additional combinations on Appeal.**

Applicants submit the application is in condition for allowance, and an early notice to that effect is requested. If any fees are due, the Commissioner is authorized to

charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-96500/LJM.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

☒ Notice of Appeal

Respectfully submitted,

Lawrence J. Merkel
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AGENT FOR APPLICANT(S)

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